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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/642,744 | 08/18/2000 | Brian F. Tack | IOWA:026US | 7819 |

7590 06/27/2005

Stephen M. Hash
FULBRIGHT & JAWORSKI L.L.P
Suite 2400
600 Congress Avenue
Austin, TX 78701

EXAMINER

MINNIFIELD, NITA M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1645

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,744

Applicant(s)

TACK ET AL.

Examiner

N. M. Minnifield

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 34-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 35-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: SEQ. SEARCH PRINTOUTS 15pgs.

DETAILED ACTION

Response to After Final Amendment

1. Applicants' amendment filed November 26, 2004 is acknowledged and has been entered. Claims 2, and 4-33 have been canceled. Claims 1, 3 and 34-55 are now pending in the present application. All rejections have been withdrawn in view of Applicants' comments with the exception of those discussed below. It is noted that the finality of the last Office Action has been withdrawn and new grounds of rejection have been set forth. This is a NON-FINAL Office Action.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The Raw Sequence Listings (RSL) filed November 26, 2004 and May 31, 2005 appear to be incorrect and do not correspond to the originally filed RSL. The current RSL (5/31/05) states that SEQ ID NO: 17 is a peptide of 12 residues, the RSL of 11/26/04 states the same. However, the originally filed RSL (8/18/00) states that SEQ ID NO: 17 is a peptide of 14 residues. Which is correct? Further, the current RSL (5/31/05) has 34 sequences yet all other previously filed RSLs have only 28 sequences. Applicants have not provided any comments regarding these 6 new sequences added to the current RSL. Is this new matter? Where is the support for these 6 sequences in the originally filed specification? Applicants should make sure that the RSL and the computer readable form of the RSL are the same, no new matter added and that both the RSL and CRF are in full compliance with the sequence rules.

Full compliance with the sequence rules is required in response to this office action. A complete response to this office action should include both compliance with the sequence rules and a response to the non-final Office Action set forth below. Failure to fully comply with **both** the sequence and response to the Office Action in the time period set forth in this office action will be held non-responsive.

4. Claims 1, 3 and 35-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite in the recitation of “an amino acid sequence”. The metes and bounds of this phrase are not clear. Do Applicants intend this phrase to mean to entire amino acid sequence as set forth in SEQ ID NO: 1 for example or a portion or fragment of the amino acid sequence set forth in the recited SEQ ID NOs? Do Applicants intend this phrase to mean all 18 amino acid residues of SEQ ID NO: 1 or 10, 5, 7 residues (i.e. any number of residues less than 18 amino acid residues)? Claim 19 lacks proper antecedent basis in the recitation of “SEQ ID NO: 19”; independent claim 1 does not recite “SEQ ID NO: 19”.

5. The new matter rejection over claims 1 and 3 has been withdrawn. The specification discloses peptides of 12-37 residues; see for example Tables 15, 17-19, 22 and 23.

6. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Larrick et al (5618675).

Larrick et al discloses a peptide comprising an amino acid sequence of SEQ ID NO: 19, 20, 21 and 24 (see SEQ ID NO: 7 and 11 of Larrick et al; attached sequence search result printouts). The Larrick et al sequences contain 29 and 16 amino acid residues respectively; which is within the claimed range of 12-37 residues. SEQ ID NO: 7 of Larrick et al is a 100% match with claimed SEQ ID NO: 24 and 19. Larrick et al discloses compositions comprising the peptides in a suitable pharmaceutical carrier (i.e. a pharmaceutical composition) (abstract; cols. 9-10).

The recitation of “antimicrobial” is intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada* 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01.

7. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Larrick et al (6103888).

Larrick et al discloses a peptide comprising an amino acid sequence of SEQ ID NO: 19, 20, 21 and 24 (see SEQ ID NO: 7 and 11 of Larrick et al; attached sequence search result printouts). The Larrick et al sequences contain 29 and 16 amino acid residues respectively; which is within the claimed range of 12-37 residues. SEQ ID NO: 7 of Larrick et al is a 100% match with claimed SEQ ID NO: 24 and 19. Larrick et al discloses compositions comprising the peptides in a suitable pharmaceutical carrier (i.e. a pharmaceutical composition) (abstract; cols. 9-10).

The recitation of “antimicrobial” is intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

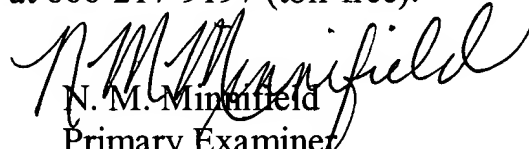
Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01.

8. Claim 34 appears to be allowable.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. M. Minnifield whose telephone number is 571-272-0860. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette R.F. Smith can be reached on 571-272-0864. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


N. M. Minnifield
Primary Examiner
Art Unit 1645

NMM
June 23, 2005